

PLANT ENGINEERING AND RECORD SYSTEM

- PURPOSE: The purpose of this addendum is to set forth suggested specifications for paper with satisfactory characteristics to be used in the commercial printing of the functional record forms introduced in Section 116, Issue No. 1 dated December 1965.
- ADDITIONS: The following standards apply to the blank forms shown in Exhibits A, B, C, and D in Section 116, Issue No. 1, December 1965.
- REQUIREMENTS: INDEX PAPER
25 PERCENT RAG
COLOR - BUFF - OPTIONAL
SUBSTANCE - (BASIS 25-1/2 x 30-1/2 IN.) - 220 POUNDS
THICKNESS - (APPROXIMATELY) - SINGLE SHEET, 0.0085 INCH;
1000 SHEETS, 8.5 INCHES
OPACITY - TEXT, ETC., E; HALF TONES, SOLIDS, ETC., E.
INK - GREEN - OPTIONAL
- USAGE: The four forms referred to above are to be 8½" x 14" outside measurements, and are proposed only as the office master copies. It is intended that additional copies (work copies) be reproduced from the periodically updated master copies on local office reproduction machines.

PLANT ENGINEERING AND RECORD SYSTEM

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EXHIBITS A, B, C, D, E
EXAMPLE: Pages 1 - 12

1. GENERAL

1.1 This section is to provide REA borrowers, consulting engineers, contractors, and other interested parties with information for use in the design, construction, and operation of REA borrowers' telephone systems. It discusses, in particular, considerations in the use of a flexible numbering system for all outside plant facilities and the adoption of a new concept in plant records prepared in a complete packet, designed particularly for circuit-by-circuit engineering of buried or aerial plant, and which is applicable to all types of outside plant facilities.

2. SCOPE

- 2.1 The intent is to provide engineering methods and a recording system having broad capabilities as follows:
- 2.11 Facilitate circuit-by-circuit design and cable pair allocation during the interval between partial completion of the detail maps, staking sheets, cable schematics, and actual cut-over of the exchange or portion of an exchange.
- 2.12 Provide flexibility of plant by means of advance engineering allocation of cable pairs (designated by home count assignments -- see TE & CM 628, "Cable Plant Layout.")
- 2.13 Insure that transmission design criteria relative to bridge tap length, outer end sections, loading, etc., are met and controlled during staking, construction, at cutover, and throughout the subsequent operation of the system.
- 2.14 Provide a method keyed to all establishments in the exchange area rather than being limited to the existing, signed, and chosen A, B, C, potential. It will furnish means whereby subscriber development and resulting future plant requirements may be accurately determined with a minimum of plant reinforcement and rearrangement. Any establishment may be readily located for existing or future service needs.
- 2.15 Provide a sequential outside plant numbering system directly related to establishment location with respect to a pedestal, terminal, or pole, and route mile distance from the central office.
- 2.16 Provide a procedure that is not directly related to one type of plant, i.e., aerial, buried, underground, open wire, etc., and can be used on any system regardless of size. It will list essential data for every subscriber loop and interoffice trunk in the system.
- 2.17 To establish a well defined and workable method that may be effectively used during construction of the system to direct splicing, termination of pairs, installation of drops, loading, pair assignment, home count allocation, control of line fill, and to substantially reduce the requirements for using staking sheets and cable schematics for these activities. It will also provide a record of dead pairs, cut pairs, spare pairs, and working pairs, and denote the specific function of every exchange loop.

2.18 Provide working records (inside and outside plant facilities) that may be reproduced on local machines (8½" x 14") for functional use by field personnel, especially those not operating directly out of a main control center. The recording capacity per page over existing record forms is materially increased.

3. THE NUMBERING SYSTEM

3.1 The rapid development of buried plant and its associated electronic components has created a need to update the methods employed for outside plant identification and location. The practice of attempting to locate a buried plant pedestal by identifying it as so near or so far from some rural house or barn is antiquated. A numbering system is needed where the permanent plant location is fixed, is controlling, and the establishment is related to the known pedestal location. The numbering system presented herein meets the following objectives:

- Is adaptable to all types of outside plant facilities, i.e., manholes, pedestals, aerial terminals, poles.
- Has a minimum and fixed number of characters.
- Requires a minimum of changes for plant expansion or rearrangements.
- Provides accurate location information for operations and maintenance personnel.
- Is easy to administer and record.

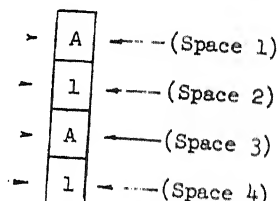
3.2 The numbering system consists of four characters: (1) a letter for cable, (2) a numeral for control point, (3) a letter for route, and (4) a number for manhole, pedestal, terminal, or pole. Pedestals, poles, etc., between two control points always count consecutively 1, 2, 3, etc., with no omissions.

CABLE LETTER

CONTROL POINT NUMBER

ROUTE LETTER

SECTION PEDESTAL OR POLE NUMBER



3.21 Space 1 is always a letter. Cables from the central office are identified A, B, C, etc., generally from a point north, clockwise around the central office.

3.22 Space 2 is always one or two numerals (1-99) except those facility identifications between the central office and the first control point which will have a dash (A-A1) in this second space. Control points and load points are the exact same locations; the control points are established and carried throughout a cable even if no loading is required. Control points are also established on open wire leads. The spacing is made to coincide with the choice of loading system, i.e., D66 = 4.5 kf, H88 = 6.0 kf, etc., or if necessary a combination of loading systems.

3.23 Space 3 is always a letter A, B, C, etc. Laterals not containing a control point are treated numerically as a part of the main route. When laterals extend beyond a control point, they are assigned the next available route letter designation.

3.24 Space 4 is always one or two numerals (1-99) except when the pedestal is a control point; then this space will have a dash (A1A-). This dash can only occur when there is a numeral in space 2.

3.3 Since loading system sections are 4,500 feet (or 6,000 feet in length in older patterns), it may be assumed, for operational location purposes, that control points occur at roughly one mile intervals (5,280 feet); i.e., a maintenance man looking for pedestal A5A1 would know it was cable A, 5th control point from central office (approximately 4.5 miles), route A, and the first pedestal beyond the 5th control point (A5A-).

3.4 The numbering system will accommodate 26 separate cables from one central office; 99 control points on any given route; 26 separate routes on a given cable; and 99 pedestals, terminals, or poles between any two control points along the route. With this flexibility and potential, it should not be necessary to deviate from the plan.

3.5 The identifying characters used on pedestals and terminals should be at least one-inch, bright colored, weatherproof, and on a dark background. The top six-inch portion of control point housings may be treated with pressure sensitive, weatherproof material of a bright color for easy identification. Control point pedestals should be kept clear of undergrowth and be easily seen from the roadway.

3.6 The numbering system, when supported by a simple directional plant diagram (See Example - Page 1), provides ready location for any desired pedestal, pole, etc., in an exchange.

4. ENGINEERING APPLICATION

4.01 The Outside Plant Facility Record (OPFR) (Exhibit B) is presented for use to fill the needs set forth in paragraph 2. After the initial grouping of establishments to subscriber lines in the design procedure, the cable sizing and reduction points are tentatively located and posted on the ACD maps and/or detail maps. This data is made firm as staking progresses, along with the exact location of load (control) points and sectional pedestals. It is at this time period that the final circuit-by-circuit design engineering and the pair-by-pair allocations should be started and initial use of the Outside Plant Facility Record employed.

4.02 Where the initial engineering phases of cable loading are done on the ACD or detail maps, the pedestal numbering system is applied, and when stabilized during staking, it is entered on the Outside Plant Facility Record. The numbering is applied to manholes, pedestals, terminals, and certain poles. On long sections of open wire pole line, it generally is necessary to enter only those pole numbers at control points and where laterals or drops are separated.

4.03 The first step is to study the general layout of each cable leaving the central office. Keep in mind that the Outside Plant Facility Record is arranged to accommodate up to 50 cable pairs or any fraction thereof. Cables are therefore viewed in 50-pair segments within their distribution area (from the pedestal where a 50-pair cable emerges from a larger cable to the out or field end of all loops within that 50-pair count). Any manholes, pedestals, terminals, or poles between the reduction point pedestal and the central office that have loading or other plant components relating directly to the 50-pair count being studied must also be considered, and they are necessarily shown on the Outside Plant Facility Record. (Example Pages 4 and 6.)

4.04 When the pedestal numbering has become firm, all establishment numbers are related to their respective pedestal, etc., and listed on the Outside Plant Facility Record. The plant facility layout portion of the OPFR is then prepared. Laterals are shown as leaving the main route either right or left with back to central office. Reduction points, facility type, size, gauge and pair counts are shown. A space is left following the "pull-off" of a lateral and another space left beyond the end of the lateral. This is to facilitate the entries on the lower portion of the sheet. An arrow is drawn in the open space to indicate if the lateral is right or left from main route.

4.05 The 50-pair cable count, or fraction thereof, is entered in the cable pair column along the left side of the sheet. The control points are drawn in. It is essential to know exactly what cable pairs are to be loaded at a given load (control) point. The symbols are then filled in with pencil to represent loaded cable pairs.

4.06 Distance is not relative to the Outside Plant Facility Record, and is only determined by the number of pedestals, etc., recorded. The pedestal-to-pedestal sectional footages and the accumulated control point kilofeet are not entered until the "as built" measurements are available from the staking sheets.

4.07 The "Term. Type" column directly under the pedestal numbers may be MF pole, HA, etc., for terminal type on aerial cable and BD2, etc., for pole. Where two pedestal housings are required for space, they are shown as 2BD.

4.08 The next step is to show by symbol the end section of each loop, fill in the double line to show only the exact pedestal or pedestals the loop has been engineered to serve. The selected pairs are included in the home count for the distribution area. The open circles should be drawn to show the allocation of the cable pair to a specific pedestal or pedestals to serve one or more establishments listed and associated with the pedestal or pedestals. The circles are filled in solid with pencil when the pair is actually placed in service. In allocating loaded pairs, caution should be exercised in keeping end-section lengths within the transmission limits as set forth in TE & CM Section 424, "Design of Subscriber Loop Plant." When the pedestal section footage figures have been posted on the Outside Plant Facility Record, each loop end section should be checked, and if transmission criteria have not been met, necessary adjustments must be made. Any such miscalculations will appear at this stage, and they should be immediately noted and necessary corrections made.

4.09 For multiparty exchanges, the line equipment number is controlling, and at time of final assignment is posted in the column "TEL. OR CIRCUIT NUMBER." For one-party exchanges, the four digit connector terminal number is controlling and is entered in this column.

4.10 Main frame bridging of cable pairs is posted to the appropriate cable pair on the Legend and Notes sheets. Load coil size and other similar information not covered by symbol on the Outside Plant Facility Record is also posted on the Legend and Notes sheet.

5. CENTRAL OFFICE FACILITY RECORD (EXAMPLE - Sheets 9 and 10)

5.1 The central office facility record is designed to replace the line and station card, and is sized to be an integral part of the overall exchange packet. The information contained thereon is keyed to the connector terminal numbers. The sheet is printed on both sides thereby providing space for recording 200 connector terminal assignments on each sheet. The size is $3\frac{1}{2}$ " x 14".

5.2 For operational purposes, where a telephone number (connector terminal number) is provided, such as on a trouble ticket, the cross reference is from connector terminal number to cable and pair.

5.3 The column headed "Station Apparatus" is also used for recording special equipment such as transmitting amplifiers, key sets (wiring plans), extension bells, etc.

5.4 The trouble record portion of the present line and station card is replaced by filing the trouble tickets as set forth in TOM Section 1238, "Trouble Reporting."

5.5 In making the initial and subsequent connector terminal assignments, care should be taken to comply with the traffic considerations in TE & CM Section 221, "Assignment of Line and Station Numbers," (Terminal Per Station Systems).

6. LINE EQUIPMENT RECORD (EXAMPLE - Sheets 11 and 12)

6.1 This form is cross-referenced to the Outside Plant Facility Record through the connector terminal numbers. The class of service does not appear elsewhere on these record forms.

6.2 The bunching block record is made a part of this form. The numbering system for bunching blocks differs with the type and make of C.O.E. and, therefore, must be obtained by the engineer from the manufacturers.

6.3 Where all one-party service is offered, the bunching block record would not be required; the line equipment record would become only a record of line equipment assigned and available, and the connector terminal numbers on the central office facility record would become all controlling for record purposes.

51-66, 68-96 14 JD- 105
51-53, 63-65, 76-78 A4B- BC

1-18 A5F- BG 3

NOTE 3: PR 167 has one 1A carrier like the with Auto. slope mounted in pedestal A2A4.

NOTE 4: Pedestals A1A- and A2A- each have approximate loading.

NOTE 5: There are four (4) each, 4 inch than C.O. and make A-A1. Windows 1, 2 and 3 are always 21 inch window No. 4 is vacant.

NOTE 6: The HA6 terminal shown at A5B3 is installed at the north end of a 40 foot aerial mast over Deer Creek.

NOTE 7: The apt is to be used as required and inserted into the record trailer as with the occasion.

5A7A-
5A7A1
5A7A2
5A7A3
5A7A4
5A7A5

LEGEND & NOTES

NUMBERING SYSTEM

CABLE (LETTER) A 1 A 1

CONTROL POINT (NUMBER) 10 63 12

ROUTE (LETTER) A 1 A 1

SECTION PEDESTAL OR TERMINAL (NUMBER) A 1 A 1

ESTABLISHMENT NUMBERS

MAP NUMBER 10 63 12

BLC. K NUMBER A 1 A 1

SHIP'S HUBER NUMBER A 1 A 1

NUMBERING SYSTEM EXAMPLES

- CABLE A, ROUTE A, 1ST PEDESTAL FROM CENTRAL OFFICE

- CABLE A, 1ST CONTROL POINT, ROUTE A FROM C.O.

- CABLE A, 1ST CONTROL POINT, ROUTE A, PEDESTAL 1 BEYOND CONTROL POINT 1.

NOTE: Numbering system always consists of a letter, a number, a letter & a number, except when dashes apply (see above).

	CABLE PAIR - IN ITS USAGE AREA		CARRIER REPEATER
	ASSIGNED PAIR		VOICE FREQUENCY REPEATER
	TEMPORARY PAIR ASSIGNMENT		CARRIER CHANNEL - INDICATE IF MORE THAN ONE CHANNEL.
	PAIR CUT DEAD		FACILITY END
	CONTROL POINT		BUILDING-OUT CAPACITORS
	LOADING AT CONTROL POINT		OPEN WIRE PIN POSITIONS
	CARRIER FILTER		
	IDENTIFYING DEAD PAIRS		

STANDARD GROUP COLOR CODE - CABLE AND MPD WIRE

1 WHITE	2 BLUE	3 RED	4 ORANGE	5 GREEN	6 SLATE	7 BLACK	8 YELLOW	9 VIOLET	10 BLUE	11 ORANGE	12 GREEN	13 SLATE	14 BLACK	15 YELLOW	16 VIOLET	17 BLUE	18 ORANGE	19 GREEN	20 SLATE	21 BLACK	22 YELLOW	23 VIOLET	24 BLUE	25 ORANGE	26 GREEN	27 SLATE	28 BLACK	29 YELLOW	30 VIOLET	31 BLUE	32 ORANGE	33 GREEN	34 SLATE	35 BLACK	36 YELLOW	37 VIOLET	38 BLUE	39 ORANGE	40 GREEN	41 SLATE	42 BLACK	43 YELLOW	44 VIOLET	45 BLUE	46 ORANGE	47 GREEN	48 SLATE	49 BLACK	50 YELLOW	51 VIOLET	52 BLUE	53 ORANGE	54 GREEN	55 SLATE	56 BLACK	57 YELLOW	58 VIOLET	59 BLUE	60 ORANGE	61 GREEN	62 SLATE	63 BLACK	64 YELLOW	65 VIOLET	66 BLUE	67 ORANGE	68 GREEN	69 SLATE	70 BLACK	71 YELLOW	72 VIOLET	73 BLUE	74 ORANGE	75 GREEN	76 SLATE	77 BLACK	78 YELLOW	79 VIOLET	80 BLUE	81 ORANGE	82 GREEN	83 SLATE	84 BLACK	85 YELLOW	86 VIOLET	87 BLUE	88 ORANGE	89 GREEN	90 SLATE	91 BLACK	92 YELLOW	93 VIOLET	94 BLUE	95 ORANGE	96 GREEN	97 SLATE	98 BLACK	99 YELLOW	100 VIOLET
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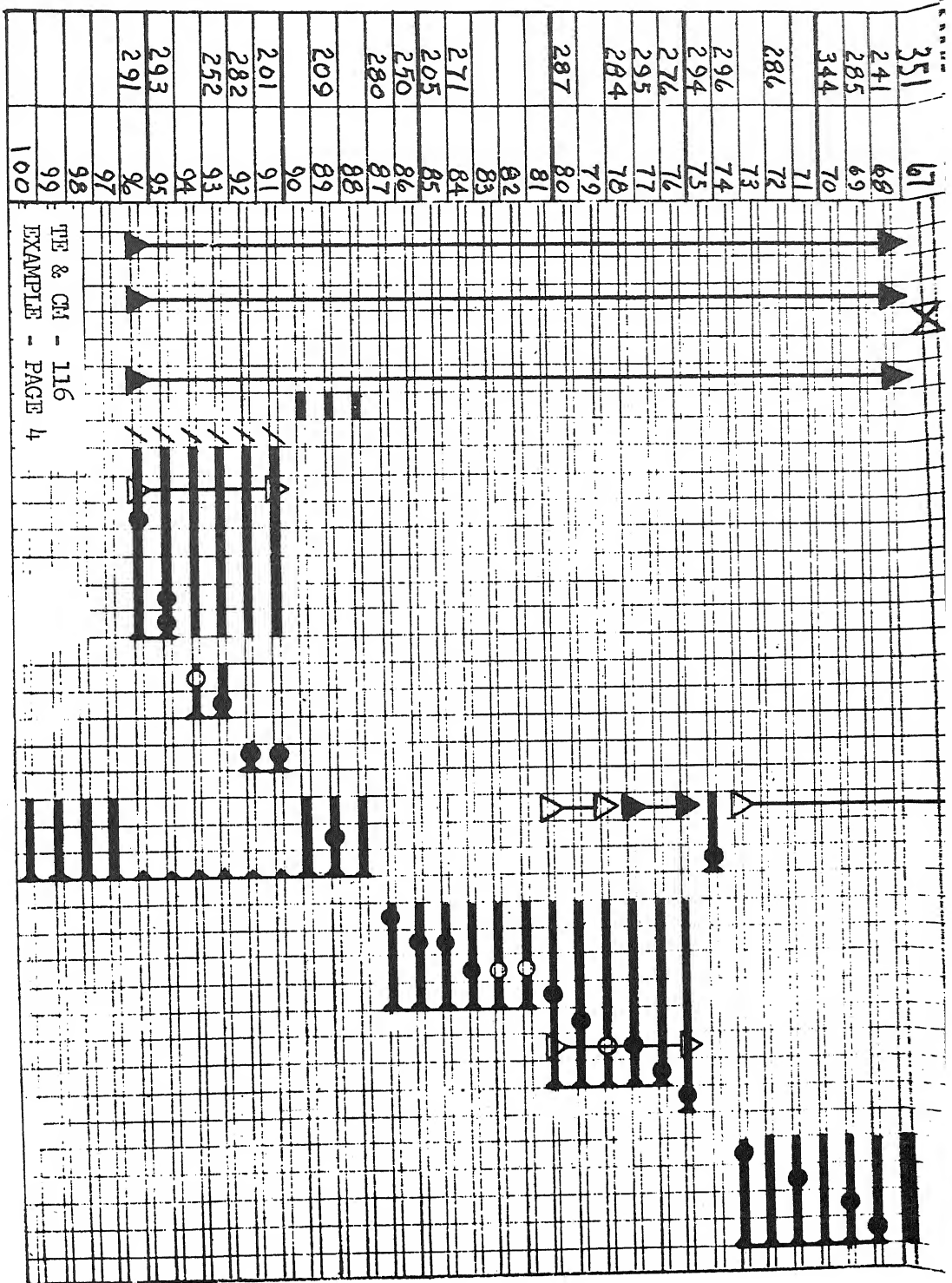
NOTE 1: The above color code is applicable for all sizes of multi-paired distribution wire.

NOTE 2: There is no set rule for any specific entry.

NOTE 3: The coding for cable A, the type of loading units and the spare coils are as follows:

TABLE 1: CABLE A, THE TYPE OF LOADING UNITS AND THE SPARE COILS

CABLE A	LOADING UNITS	SPARE COILS
1	10	10
2	20	20
3	30	30
4	40	40
5	50	50
6	60	60
7	70	70
8	80	80
9	90	90
10	100	100
11	110	110
12	120	120
13	130	130
14	140	140
15	150	150
16	160	160
17	170	170
18	180	180
19	190	190
20	200	200
21	210	210
22	220	220
23	230	230
24	240	240
25	250	250
26	260	260
27	270	270
28	280	280
29	290	290
30	300	300
31	310	310
32	320	320
33	330	330
34	340	340
35	350	350
36	360	360
37	370	370
38	380	380
39	390	390
40	400	400
41	410	410
42	420	420
43	430	430
44	440	440
45	450	450
46	460	460
47	470	470
48	480	480
49	490	490
50	500	500
51	510	510
52	520	520
53	530	530
54	540	540
55	550	550
56	560	560
57	570	570
58	580	580
59	590	590
60	600	600
61	610	610
62	620	620
63	630	630
64	640	640
65	650	650
66	660	660
67	670	670
68	680	680
69	690	690
70	700	700
71	710	710
72	720	720
73	730	730
74	740	740
75	750	750
76	760	760
77	770	770
78	780	780
79	790	790
80	800	800
81	810	810
82	820	820
83	830	830
84	840	840
85	850	850
86	860	860
87	870	870
88	880	880
89	890	890
90	900	900
91	910	910
92	920	920
93	930	930
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95	950	950
96	960	960
97	970	970
98	980	980
99	990	990
100	1000	1000

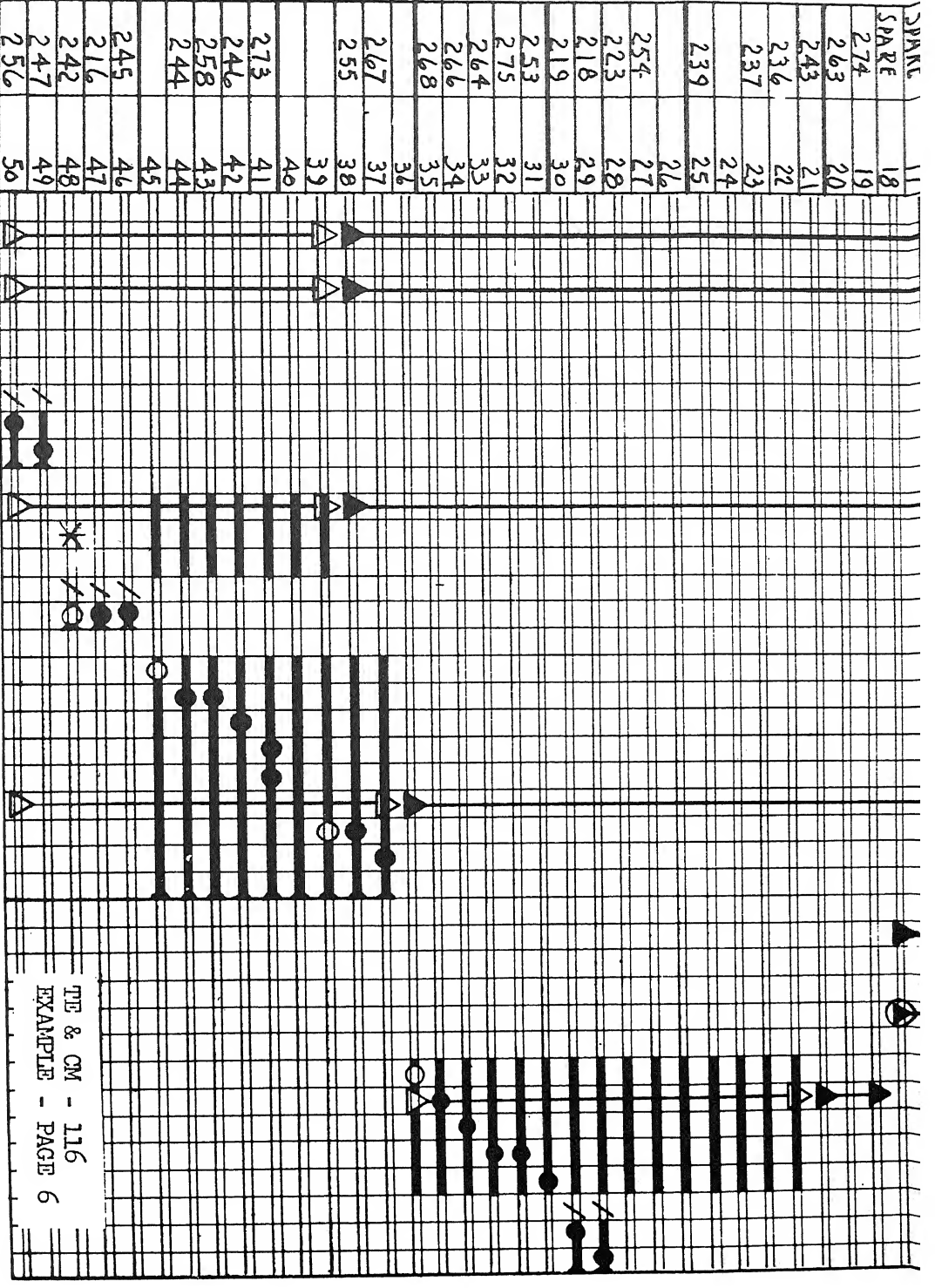


OFFICE	CABLE COUNT	SHEET COUNT	SHEET NUMBER	CABLE
262	1-150	101-150	1	A

OUTSIDE PLANT FACILITY RECORD

A

OUTSIDE PLANT FACILITY RECORD									
ESTABLISHMENT NUMBERS				<div>262</div> <div>1-150</div> <div>51-100</div> <div>2 OF 5</div> <div>A</div>					
OFFICE				CABLE COUNT		SHEET COUNT		SHEET NUMBER	
PLANT FACILITY LAYOUT	PEDESTAL SECTION FEET	CONTROL POINT K/F	SECTION PED. NO. ...	ROUTE LETTER	CONTROL POINT NO. ...	CABLE LETTER	TEL. OR CIRC. UNIT NUMBER	TERMINAL TYPE	PAIR
B1150-24P	1-150	2,25	674	11	24	CO	BD4 A1 A	→	51
B1150-24P	9-96	3010					BD4 A2 A	→	52
B1150-24P	9-96	1490					BD4 A2 A4	→	53
B1150-24P	9-96	850					BD3 A3 B	→	54
B1150-24P	9-96	1810					3 A3 B1	→	55
B1150-24P	9-96	1830					BD2 A3 C1	→	56
B1150-24P	9-96	600					2 A4 C1	→	57
B1150-24P	9-96	597					2 A4 C2	→	58
B1150-24P	9-96	675					2 A4 C3	→	59
B1150-24P	9-96	680					2 A4 C4	→	60
B1150-24P	9-96	598					2 A4 C5	→	61
B1150-24P	9-96	610					BD2 A4 C6	→	62
B1150-24P	9-96	580					2 A4 C7	→	63
B1150-24P	9-96	1022					BD2 A4 C8	→	64
B1150-24P	9-96	3650					BD4 A4 B	→	65
B1150-24P	9-96	550					3 A4 B1	→	66
B1150-24P	9-96	580					3 A4 B2	→	67
B1150-24P	9-96	560					BD2 A4 D1	→	68
B1150-24P	9-96	570					2 A4 D2	→	69
B1150-24P	9-96	545					2 A4 D3	→	70
B1150-24P	9-96	548					2 A4 D4	→	71
B1150-24P	9-96	560					2 A4 D5	→	72
B1150-24P	9-96	520					2 A5 D1	→	73
B1150-24P	9-96	530					2 A5 D2	→	74
B1150-24P	9-96	511					BD2 A4 E1	→	75
B1150-24P	9-96	910					2 A4 E2	→	76
B1150-24P	9-96	870					2 A4 E3	→	77
B1150-24P	9-96	890					2 A4 E4	→	78
B1150-24P	9-96	860							79



CABLE				
OFFICE	CABLE COUNT	SHEET COUNT	SHEET NUMBER	CABLE
262	51-1	89-15	3 OF 5	A

OUTSIDE PLANT FACILITY RECORD

262

1-150

1-50

4 of 5

A

OFFICE CABLE COUNT SHEET COUNT SHEET NUMBER CABLE

ESTABLISHMENT NUMBERS

PLANT FACILITY LAYOUT

PEDESTAL SECTION FEET

CONTROL POINT KF

SECTION PED. NO. ...

ROUTE LETTER

CONTROL POINT NO.

CABLE LETTER

TEL. OR CABLE NO.

NUMBER

DATE

311-AV1

312-AV2

313-AV3

314-AV4

315-AV5

316-AV6

317-AV7

318-AV8

319-AV9

320-AV10

321-AV11

322-AV12

323-AV13

CO
2BD4 A 1 A
2BD4 A 2 A
BD4 A 2 A 4
BD3 A 2 A 5
BD2 A 2 A 6
" 2 A 2 A 7
BD4 A 3 A
" 3 A 3 A 1
" 3 A 3 A 2
BD2 A 3 A 3
BD3 A 3 A 4
" 3 A 3 A 5
" 3 A 3 A 6
" 3 A 3 A 7
" 3 A 3 A 8
" 3 A 4 A 1
" 3 A 4 A 2
" 3 A 4 A 3
BD4 A 5 F
" 3 A 5 F 1
" 3 A 5 F 2
" 4 A 5 F 3
BD2 A 4 A 4
" 3 A 5 A 1
" 2 A 5 A 2
" 2 A 5 A 3
BD2 A 5 A 4
" 2 A 5 A 5

2.25 674 11.25 15.72 20.22 20.14

3010 800 760 510 700 572 738 1070 610 800 370 260 650 480 970 950 1060 1520 1205 1196 1211 1200 900 620 610 702 720 412

B150-24P 1-150 2-19 49.50 6.24 4.48 1-50 1-18 19.34 28.30

10-72-24
10-72-60
10-72-20
10-72-14, 16
10-72-13, 15, 17
10-72-6, 7
10-72-4, 12
10-72-5
10-72-3
10-72-1, 2
10-72-8
10-62-15
10-62-12
10-62-14
10-62-10, 19
10-62-5, 6
10-62-9
10-62-13

OUTSIDE PLANT FACILITY RECORD

262

1-150

19-36

5 OF 5

A

OFFICE CABLE COUNT SHEET COUNT SHEET NUMBER CABLE

ISHMENT NUMBERS

20

TE & CM - 116
EXAMPLE - PAGE 8

OUTSIDE PLANT FACILITY RECORD

		OFFICE	CABLE COUNT	SHEET COUNT	SHEET NUMBER	OF	CABLE
ESTABLISHMENT NUMBERS							
PLANT FACILITY LAYOUT							
PEDESTAL SECTION FEET							
CONTROL POINT KF							
SECTION PED. NO. ...							
ROUTE LETTER							
CONTROL POINT NO.							
CABLE LETTER							
TEL. OR CIRCUIT NUMBER							
TERM. TYPE							
CABLE PAIR							

CONN. TERM	LINE EQ. NO.	CABLE PAIR	PEDESTAL NUMBER	BU BLK	ESTAB. NUMBER	STATION APPARATUS	CONN. TERM	LINE EQ. NO.	CABLE PAIR	PEDESTAL NUMBER	BU BLK	ESTAB. NUMBER	STATION APPARATUS
50							00						
59							09						
58							08						
57							07						
56							06						
55	271	84	A4D3	1-1	10-63-56	1-S1	105						
54							04						
53							03						
52	295	77	A5D1	-	10-63-12	1-S1	02						
51	385	62	A4B3	-	10-73-44	1-S1	01						
40							90						
49	209	89	A4B1	-	10-73-40	1-S1	99						
48							98						
47	276	76	A5D2	-	10-63-71	2-S1	97						
46	204	61	A4B4	-	10-63-17	1-S1	96						
45							95						
44							94						
44	294	75	A4B2	-	10-73-3	1-S1, 1-S3	94						
43	362	59	A4B6	-	10-63-12	1-S1	02						
41	250	86	A4D2	-	10-63-32	1-S1	01						
40	276	76	A5D1	-	10-63-12	1-S1	80						
39	204	61	A4B4	-	10-63-17	1-S1	80						
38							80						
37							80						
36							80						
35							80						
34							80						
33							80						
32							80						
31							80						
30							80						
29							80						
28							80						
27							80						
26							80						
25							80						
24							80						
23							80						
22							80						
21							80						
20							80						
19							80						
18							80						
17							80						
16							80						
15							80						
14							80						
13							80						
12							80						
11							80						
10							80						
9							80						
8							80						
7							80						
6							80						
5							80						
4							80						
3							80						
2							80						
1							80						

GROUP

300

[illegible]

OUTSIDE PLANT LOCATION DIAGRAM

THE & CM - 116
EXHIBIT A - BACK

LEGEND

NUMBERING SYSTEM

CABLE (LETTER) A 1 A 1
 CONTROL POINT (NUMBER) _____
 ROUTE (LETTER) _____
 SECTION PEDESTAL OR TERMINAL (NUMBER) _____

ESTABLISHMENT NUMBERS

MAP NUMBER 10 63 12
 BLOCK NUMBER _____
 SUBS. KIBER NUMBER _____

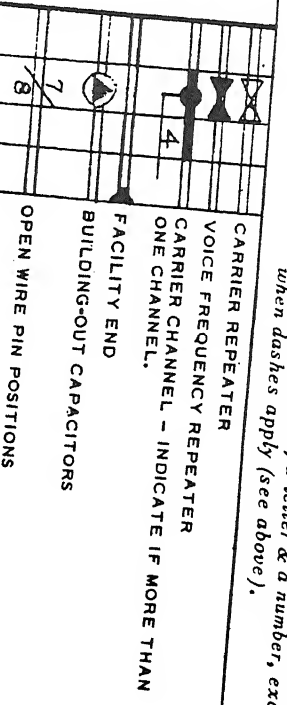
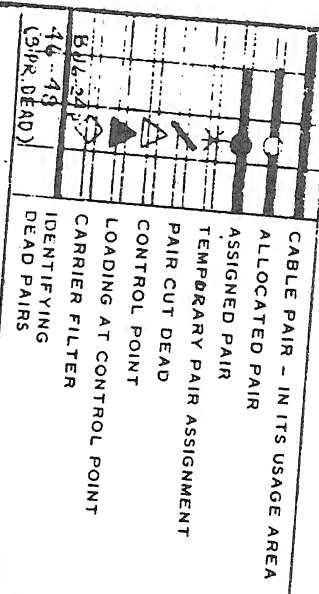
A - A 1

A 1 A -

A 1 A 1

NUMBERING SYSTEM EXAMPLES
 - CABLE A, ROUTE A, 1ST PEDESTAL FROM CENTRAL OFFICE
 - CABLE A, 1ST CONTROL POINT, ROUTE A FROM C.O.
 - CABLE A, 1ST CONTROL POINT, ROUTE A, PEDESTAL 1 BEYOND CONTROL POINT 1.

NOTE: Numbering system always consists of a letter, a number, a letter & a number, except when dashes apply (see above).



STANDARD GROUP COLOR CODE - CABLE AND MPD WIR

1	WHITE	BLUE	7	RED	BLUE	11	BLACK	BLUE	15	YELLOW	BLUE	21	VIO
2	WHITE	ORANGE	8	RED	ORANGE	12	BLACK	ORANGE	16	YELLOW	ORANGE	22	VIO
3	WHITE	GREEN	9	RED	GREEN	13	BLACK	GREEN	17	YELLOW	GREEN	23	VIO
4	WHITE	BROWN	10	RED	BROWN	14	BLACK	BROWN	18	YELLOW	BROWN	24	VIO
5	WHITE	SLATE	11	RED	SLATE	15	BLACK	SLATE	19	YELLOW	SLATE	25	VIO

NOTE 1: USE ABOVE COLOR CODE IN NUMERICAL ORDER FOR ALL COLOR - CODED CABLES SMALLER THAN TWENTY
 NOTE 2: USE ABOVE COLOR CODE IN NUMERICAL ORDER FOR ALL COLOR - CODED CABLES SMALLER THAN TWENTY
 NOTE 3: THE ABOVE COLOR CODE IS APPLICABLE FOR ALL TWENTY-FIVE PAIR COLOR STRING COLOR CODE.
 NOTE 4: USE ABOVE COLOR CODE IN NUMERICAL ORDER FOR ALL SIZES OF MULTI-PAIRED DISTRIBUTION WIRE.

[illegible]

TPE & CM - 116
EXHIBIT B - BACK

CABLE

[illegible]

OFFICE

CENTRAL OFFICE FACILITY RECORD

GROUP

CONN. TERM	LINE EQ. NO.	CABLE PAIR	PEDESTAL NUMBER	BU BLK	ESTAB. NUMBER	STATION APPARATUS	CONN. TERM	LINE EQ. NO.	CABLE PAIR	PEDESTAL NUMBER	BU BLK	ESTAB. NUMBER	STATION APPARATUS
50							00						
59							09						
58							08						
57							07						
56							06						
55							05						
54							04						
53							03						
52							02						
51							01						
40							90						
49							99						
48							98						
47							97						
46							96						
45							95						
44							94						
43							93						
42							92						
41							91						
30							80						
39							89						
38							88						
37							87						
36							86						
35							85						
34							84						

[illegible]

TE & CM - 116
EXHIBIT E - BACK

OUTSIDE PLANT FACILITY RECORD

OFFICE CABLE COUNT SHEET COUNT SHEET NUMBER CABLE

OF

OPEN WIRE APPLICATION

ESTABLISHMENT NUMBERS

PLANT
FACILITY
LAYOUT

PEDESTAL
SECTION
FEET

CONTROL POINT KF

SECTION PED. NO. ...

ROUTE LETTER

CONTROL POINT NO.

CABLE LETTER

TEL. OR
CIRCUIT

NUMBER

TERM.
TYPE

CABLE
PAIR

350
298
260
229

KF	...	NO	↓	↑	1	2	3	4	5	6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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NOTE: THIS EXAMPLE IS IN NO WAY RELATED TO THE